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EXAMINER				
CHAPEL, DEREK S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/556,457

Applicant(s)

SEIFERT ET AL.

Examiner

DEREK S. CHAPEL

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/12/05, 11/17/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 11/12/2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status Of Claims

1. It is interpreted by the examiner that the claims received on 11/12/2005 are the most recent claims and therefore claims 1-16 are pending for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The Information Disclosure Statement(s) (IDS) filed on 11/12/2005 was considered.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 23. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 10, 12, 14, 16 (it is noted that the specification references guide elements 9-17), 35, 37, 38, and Figure 4 (it is noted that there is a Figure 4a and a Figure 4b but no Figure 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "13" has been used to designate both a further rotational axis and a further guide element. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be

labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "15" has been used to designate both a further guide element and the other guide element. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "13" and "15" have both been used to designate a further guide element. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

9. The abstract of the disclosure is objected to because "The invention concerns a fine tuning" should be changed to --A fine tuning--. Correction is required. See MPEP § 608.01(b).

Claim Objections

10. Claims 5, 10, 11 and 12 recite the limitation "the further guide element". There is insufficient antecedent basis for this limitation in the claim. Claim 12 is objected to for inheriting the informalities of claim 11.

11. Claim 11 recites the limitation "the further rotational axis". There is insufficient antecedent basis for this limitation in the claim. Claim 12 is objected to for inheriting the informalities of claim 11.

Claim Rejections - 35 USC § 112

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4, 5, 10, 11, 12, and 15 include many limitations using the alternative language "and/or." Repeated use of "and/or" creates uncertainty as to metes and bounds of the claim(s) because it is unclear from the multiplicity of combinations possible which features are intended to be included in the claimed combination. Claims 2-14 and 16 depend from at least claims 1 or 15 and therefore are rejected for inheriting the informalities of claims 1 and 15. For the purpose of this examination, "and/or" has been interpreted to mean --or--.

14. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear how the guide element can be rotated within itself. Claim 7 is rejected for inheriting the informalities of claim 6.

15. Claim 8 recites the limitation "the further guide element". There is insufficient antecedent basis for this limitation in the claim. It is not clear from this claim whether there is an additional guide element in claim 8, or whether claim 8 merely improperly refers to the guide element of claim 1. Claim 9 is rejected for inheriting the informalities of claim 8.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

17. Claims 1-5, 10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Ryan, U.S. Patent Number 2,263,684 (hereafter Ryan).

18. As to claim 1, Ryan discloses a fine tuning device (see at least figure 1, elements 18 or 28) for transferring or tipping an object (see at least figure 1, elements 18, 20, 24 and 25 or elements 28, 30, 34 and 35), wherein a carrier element (see at least figure 1, elements 24 and 25 or 34 and 35) is provided that can be rotated around a rotational axis (see at least figure 1) guided by a guide element (see at least figure 1, element 12), whereby

tipping between the carrier element and the guide element is achieved by defining a guide plane that describes an angle other than 90° around the rotational axis (see at least figure 1, the spacing between element 24 and the guide element 12 as well as between element 34 and the guide element 12 is taken to be the guide plane; further, it is noted that as elements 24 and 34 rotate inside the guide element 12, the elements 25 and 35 are tipped in relation to their starting positions) or,

transfer of the object is achieved by means of an offset that is attached to the carrier element lateral to the rotational axis.

19. As to claim 2, Ryan discloses that the guide element is guided by a further guide element around the rotational axis (see at least figure 1, the element between elements 24 and 34 which works in conjunction with guide element 12 to keep elements 18 and 30 tipping in the same plane) or a further rotational axis.

20. As to claim 3, Ryan discloses that the fine tuning device can be integrated as an element into a further fine tuning device (see at least figure 1, elements 18 and 28, the device of 18 is integrated with the device of 28 and vice versa).

21. As to claim 4, Ryan discloses that the further fine tuning device (see at least figure 1, elements 18 or 28) wherein a carrier element (see at least figure 1, elements 24 and 25 or 34 and 35) is provided that can be rotated around a rotational axis (see at least figure 1) guided by a guide element (see at least figure 1, element 12), whereby tipping between the carrier element and the guide element is achieved by defining a guide plane that describes an angle other than 90° around the rotational axis (see at least figure 1, the spacing between element 24 and the guide element 12 as well as between element 34 and the guide element 12 is taken to be the guide plane; further, it is noted that as elements 24 and 34 rotate inside the guide element 12, the elements 25 and 35 are tipped in relation to their starting positions) or,

transfer of the object is achieved by means of an offset that is attached to the carrier element lateral to the rotational axis.

22. As to claim 5, Ryan discloses that the carrier element or the guide element or a further guide element are round in cross-section (see at least figure 1, element 12, 24, 34 or the element between elements 24 and 34).

23. As to claim 10, Ryan discloses that a control lever may be inserted into the carrier element (see at least figure 1, elements 25 or 35) or the guide element (see at least figure 1, elements 25 or 35) or a further guide element.

24. As to claim 13, Ryan discloses that elements that touch each other directly are made of different materials (see at least figures 1 and 2, elements 15 (plastic) and 16 (glass) as well as column 1, lines 42-52 and column 2, lines 51-55; it is noted that due to the open language of claim 1, any two elements that touch each other and are made of different materials satisfy this claim limitation, and not all touching elements have to be of different materials).

25. Claims 1-5 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Mika, U.S. Patent Number 5,517,354 (hereafter Mika).

26. As to claims 1 and 15, Mika discloses a microscope (see at least figure 1, element 28) with a fine tuning device (see at least figure 1, element 30) for transferring or tipping an object (see at least figure 1, element 28), wherein a carrier element (see at least figure 3, elements 44 and 62) is provided that can be rotated around a rotational axis (see at least figure 3) guided by a guide element (see at least figure 3, element 94), whereby

tipping between the carrier element and the guide element is achieved by defining a guide plane that describes an angle other than 90° around the rotational axis (see at least figure 3, either the threads, which are angled with respect to the rotational axis, or the spacing between element 62 and the guide element 94, is taken to be the guide plane) or,

transfer of the object is achieved by means of an offset that is attached to the carrier element lateral to the rotational axis.

27. As to claim 2, Mika discloses that the guide element is guided by a further guide element around the rotational axis (see at least figure 3, elements 82, 88, 90, 106 or 98) or a further rotational axis.

28. As to claim 3, Mika discloses that the fine tuning device can be integrated as an element into a further fine tuning device (see at least figure 1, element 30 not chosen for claim 1 (i.e. element 30 at the other corner of the adjustable base 10)), the plurality of interchangeable microscope objectives, the focus knob of the microscope and the pivoting mirror of the microscope are all taken to be further fine tuning devices).

29. As to claim 4, Mika discloses that the further fine tuning device (see at least figure 1, element 30 not chosen for claim 1 (i.e. element 30 at the other corner of the adjustable base 10)) wherein a carrier element (see at least figure 3, elements 44 and 62) is provided that can be rotated around a rotational axis (see at least figure 3) guided by a guide element (see at least figure 3, element 94), whereby

 tipping between the carrier element and the guide element is achieved by defining a guide plane that describes an angle other than 90° around the rotational axis (see at least figure 3, either the threads, which are angled with respect to the rotational axis, or the spacing between element 62 and the guide element 94, is taken to be the guide plane) or,

 transfer of the object is achieved by means of an offset that is attached to the carrier element lateral to the rotational axis.

30. As to claim 5, Mika discloses that the carrier element or the guide element or a further guide element are round in cross-section (see at least figure 3, element 94).

31. As to claim 13, Mika discloses that elements that touch each other directly are made of different materials (see at least figures 1-3, elements 12 (metal or plastic) and 22 (rubber) as well as column 2, line 64 through column 3, line 10; it is noted that due to the open language of claim 1, any two elements that touch each other and are made of different materials satisfy this claim limitation, and not all touching elements have to be of different materials).

32. As to claim 14, Mika discloses that the object is an optical component, in particular an objective (see at least figure 1 which shows two interchangeable objectives).

Claim Rejections - 35 USC § 103

33. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

34. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

35. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

36. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mika, U.S. Patent Number 5,517,354 (hereafter Mika).

37. As to claim 16, Mika does not specifically disclose that the microscope is a scanning microscope, a confocal scanning microscope, a 4 pi microscope, or a theta microscope.

However, Official Notice is taken that scanning microscopes, confocal scanning microscopes, 4 pi microscopes, and theta microscopes are all well known types of microscopes, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the microscope of Mika with either a scanning microscope, a confocal scanning microscope, a 4 pi microscope, or a theta microscope for at least the purpose of performing scanning microscopy while allowing adjustment of the base of the microscope to maintain a neutral position in the neck, back and shoulder areas of the user, as taught by Mika (see at least the abstract of Mika).

Conclusion

38. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEREK S. CHAPEL whose telephone number is (571)272-8042. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. S. C./
Examiner, Art Unit 2872
12/11/2008

/Stephone B. Allen/
Supervisory Patent Examiner
Art Unit 2872